



Application Serial No. 10/075,833

Attorney Docket No. PF010013

In the Claims

1. (Previously Presented) A method for automatically controlling the gain in a radiofrequency signal reception device, said device comprising at least one first low-noise amplification stage placed following a reception antenna, and at least one variable-gain device placed in the reception facility, the method comprising the steps of:

neutralization of the signal received by the antenna; and
adjustment of the gain during the neutralization of the signal received until a predetermined noise level is obtained at the end of the reception facility wherein, during signal reception, the following steps are performed:
extraction of the thermal noise power at the end of the reception facility; and
adjustment of the gain until a predetermined noise level is obtained.

2. (Previously Presented) The method according to Claim 1, wherein the neutralization of the signal received is carried out by cutting off the supply to the first low-noise amplification stage.

3. (Cancelled)

4. (Previously Presented) The method according to Claim 1, wherein the extraction of the noise power at the end of the facility is carried out by performing the following steps:

sampling and digitization of the signal at the end of the reception facility;
digital demodulation of the digitized signal;
modulation of the demodulated signal; and
calculation of the noise power from the modulated signal and the digitized signal.

5. (Previously Presented) A radio frequency signal reception device, said device comprising:

at least one first low-noise amplification stage placed following a reception

at least one variable-gain device placed in the reception facility;
means for neutralizing the signal received by the antenna; and
means for adjusting the variable-gain device as a function of the noise level at
the end of the reception facility, wherein said device further comprises:
means for extracting the thermal noise power during the reception of the
signal; and
means for adjusting the variable-gain device as a function of the noise level
extracted.

6. (Previously Presented) The device according to Claim 5, wherein the means
for neutralizing the signal received are switching means which switch the supply of
the first amplification stage.

7. (Cancelled)

8. (Previously Presented) The device according to Claim 5, wherein the means
for extracting the noise power during reception further comprises:

means of sampling and means of converting the signal at the end of the facility
into a digitized signal;
means for performing the digital demodulation of the signal and for
obtaining a demodulated signal;
digital modulation means for modulating the demodulated signal
and obtaining a modulated signal; and
means for calculating the noise power from the modulated signal and the
digitized signal.

9. (Previously Presented) A device for transmitting/receiving radiofrequency
signals transmitted by a satellite comprising:
at least one first low-noise amplification stage placed following a
reception antenna; and
at least one variable-gain device placed in the reception facility, wherein said

means for extracting the thermal noise power during the reception of the signal; and

means for adjusting the variable -gain device as a function of the noise level extracted.

10. (Previously Presented) The device according to Claim 9, wherein the means for neutralizing the signal received are switching means which switch the supply of the first amplification stage.

11. (Cancelled)

12. (Previously Presented) The device according to Claim 9, wherein said means for extracting the noise power during reception includes:

sampling means and means of converting the signal at the end of the facility into a digital signal;

means for performing the digital demodulation of the signal and for obtaining a demodulated signal;

means of digital modulation for modulating the demodulated signal and obtaining a modulated signal; and

means for calculating the noise power from the modulated signal and the digitized signal.